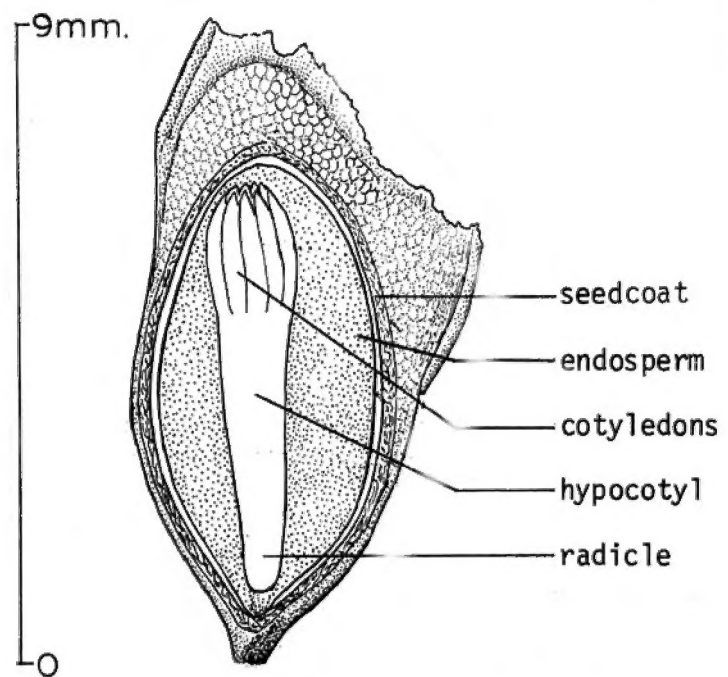


Sage Notes

Idaho Native Plant Society



Inside this issue –

Annual Rare Plant Conference Announcement

INPS Grant Opportunity Announcement

Membership renewal and questionnaire

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Submissions: Members and others are invited to submit material for publication. Articles in any form, even hand-written, are welcome, as is artwork. Please provide a phone number in case there are questions. Material will be returned upon request.

Please try to submit items for coming issues by the following dates: Spring, February 1, 2006; Summer, May 1 2006; Fall, September 1, 2006; Winter, December 1, 2006.

Cover: *Pseudotsuga menziesii* seed cross-section. USDA Forest Service from USDA NRCS PLANTS Database.

Opposite: *Acer glabrum*. USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. Illustrated flora of the northern states and Canada. Vol. 2: 497.

Editor's Note:

Many thanks, again, to all of those that have kept this – the premier newsletter on conservation of Idaho native plants and their habitats – on our shelves and coffee tables over the years.

There is a general consensus within the Society that Sage Notes should be produced by a committee. The job is too much for one person to take on - for any length of time or in a sustainable manner. Rather, we need a team of folks, all contributing small or large pieces to the whole; either in a series of contributions (produced reliably for sequential issues) or as a single installment.

Sage Notes is open to all. A vast amount of opportunity is here: little ideas, big dreams, stories, technical papers, white papers on conservation issues, personal reflections, artistic renderings, imagery, book reviews, lists (of plants, people, or places; lists of lists), poetry, field reports, meeting reports, and advertisements.

Opportunity abounds! Please consider submitting to Sage Notes. Better yet - please consider serving on the Sage Notes Editorial Committee.

Thanks,
Ed Com.



HELP WANTED: Writers, artists, editors, publishers to contribute to Sage Notes.

HELP WANTED: Contributing editor to assist with compilation of announcements and reviews of INPS chapter meetings.

HELP WANTED: Contributing editor to assist with compilation of announcements and summaries of INPS field trips.

HELP WANTED: Contributing editor to assist with compilation of Sage Notes conservation briefs.

HELP WANTED: Contributing editor to assist with compilation of Sage Notes news and notes.

President's Message

By Steve Rust

This has been a busy and fruitful year for Idaho Native Plant Society. In July we had an excellent annual meeting at Challis Hot Springs. The Society hosted an engaging rare plant conference with active discussion on the conservation status of native species in Idaho and the plant communities that form their habitats. The Society is actively engaged in addressing education and conservation issues and is taking action to conserve Idaho's rich natural heritage. Chapters are active and membership in the Society continues to grow. Many thanks to all that have made this such a successful year!

We look ahead to a bright new year from a steadfast organizational base. At this time we have a full complement of standing committees. We will continue to focus on transferring ownership of Society functions to committees, fostering environments in which small incremental contributions create a whole that is greater than the sum of its parts, and developing organizational structures that allow a range of different levels of involvement and the capability of players to come and go with out loss of function.

Discussion and action on internal governance is necessary and enabling. In June I argued that perhaps in lengthy engagements regarding internal governance we have lost pace in actually pursuing our mission: fostering understanding and advocating conservation of Idaho's native flora and habitats. I have come full around on this position and now believe that we need to totally revamp the Society's by-laws. In this new year I will work to institute (for lack of better words) a policy manual. I envision a living document in which Board and membership decisions are summarized in a manner that parallels the Society's by-laws.

This fall, with overwhelming support of it's membership, Pahove Chapter pursued an administrative appeal of a federal land management decision. As the legal action pressed resolution a flurry of activities ensued. Due to potential conflicts of interest with business partners I needed to recuse myself from involvement in decisions regarding the appeal. Out of concern for their professional careers other INPS officers had to resign. Worse yet, communications intensified and embarrassing emails were circulated. An emergency meeting of the INPS Board convened. Questions were raised about policy. In the end, the appeal was settled and steps will be taken to protect rare plant species and native plant communities. Best yet, we walked the talk! Many thanks to Judy, Cyndi, and the Advocates.

Happy New Year!

Conservation Briefs

Compiled by Tom Jefferson

Anti-Endangered Species Bill in Senate -- Idaho's Senator Crapo Introduces Bill to Undermine Endangered Species Act

*By Melissa Waage and Brian Nowicki, Center for
Biological Diversity*

On December 15, 2005 Senator Mike Crapo introduced a bill to drastically undermine the Endangered Species Act. Senate bill S. 2110, cynically titled the "Collaboration and Recovery of Endangered Species Act," would completely derail the endangered species listing program, remove protections for endangered species habitat, and cut federal oversight of projects that threaten endangered species. Text of the bill is available on the Center for Biological Diversity web page (biologicaldiversity.org).

Perhaps the most blatant attack on the Endangered Species Act (ESA) is the provision of the Crapo bill that would allow the Secretary of Interior to indefinitely postpone placing species on the endangered list or designating critical habitat, and would shield the Secretary from court orders to induce her to provide those protections.

The Crapo bill pays lip service to encouraging landowners to conserve endangered species on private land, an idea long supported by conservation organizations. However, the Crapo bill focuses on giving large tax breaks to large-scale land developers and eliminating habitat protections rather than encouraging or enabling conservation on private land.

The proposed legislation adopts the worst provisions of similar bill passed by the House. On September 29, the House passed HR 3824 by Rep. Pombo (R-CA) – a bill that would repeal entire sections of the Endangered Species Act. ESA bills that pass the Senate this year would be referred to a conference committee to be merged with the Pombo bill from the House. The two leaders of such a conference committee would be Rep. Pombo and Senator Inhofe (R-OK), who has an environmental voting score of 0 according to the League of Conservation Voters. Senator Crapo also has an environmental voting score of 0 according to the League of Conservation Voters.

The Fisheries, Wildlife, and Water Subcommittee, under the leadership of Sen. Lincoln Chafee (R-RI), is considering ESA reauthorization of its own, but has committed to developing such legislation only after gathering adequate information, and hearing from agencies, experts and stakeholders. The introduction of the Crapo bill today appears to be a rush topurposely sidestep that deliberative process.

Overview of proposed "Collaboration and Recovery of Endangered Species Act"

Makes habitat protection and species listing discretionary (pages 18-19): the bill would eliminate mandatory timelines to place species on the endangered list or designate critical habitat for endangered species, giving the Secretary of Interior complete discretion to prioritize designations based in part on "minimizing conflicts" with "construction, development...or other economic activities." Even then the Secretary would not be required to implement the schedule. Citizen groups would be banned from seeking court orders to implement any critical habitat schedules or deadlines. All existing court orders to designate critical habitat would be overruled by the bill.

Killing one species in exchange for another (pages 36-41): the bill would create a system allowing developers to buy and sell credits for destroying endangered species habitat. This senseless system would allow developers to destroy the habitat for one species (e.g. Coho salmon) because they have purchased credits to protect another (e.g. Mount Hermon june beetle). It would result in the destruction of tens of thousands of acres of essential habitat areas.

Undermines recovery plans (pages 21-28): the bill would create a new recovery planning process that allows industry to rewrite and overrule the decisions of wildlife experts. A newly created "executive committee" made up of industry interests would make final edits and revisions to recovery plans developed by scientists and agency biologists. The bill explicitly makes recovery plans "non-binding and advisory."

Creates roadblocks to listing endangered species (pages 16-18): the bill would create an ambiguous priority system for listing endangered species that includes industry interests. Current law requires endangered species listings to be based solely on the biological needs of the species.

Eliminates federal oversight of endangered species (page 15): the bill would require Fish and Wildlife Service (USFWS) to provide a "provisional permit" for any project on private property (except for "ground clearing") if there is no recovery plan in place. The permit would remain in effect until a habitat conservation plan (HCP) is approved. This would allow activities like mining and logging in endangered species habitat to proceed indefinitely with no federal oversight.

Restricts wildlife agencies from improving conservation agreements (pages 50-53): the bill would take "No Surprises" – a highly controversial administrative regulation – and make it law. USFWS would be unable to update or revoke a permit (HCP) that authorizes harm to an endangered species, even if new information indicates that the original plan was inadequate and even if it is causing the extinction of the species.

Pays off developers to not violate the law (page 56): the bill would create tax breaks to compensate private landowners for conservation work done on private property. The bill fails to limit tax breaks to landowners who engage in active conservation – the creation or enhancement of endangered species habitat. Land developers who are required to set aside some portion of their land from development would also be eligible for these tax breaks. That is, instead of paying private landowners to create new habitat, the Crapo bill would primarily be paying developers to comply with the law, creating no new habitat.

Adopted from Center for Biological Diversity

Hardtrigger Allotment Appeal

Settlement to result in further consideration of rare plant species and native plant communities

On March 28, 2005, the Pahove Chapter of Idaho Native Plant Society officially protested a proposed Bureau of Land Management administrative decision regarding the management of the Hardtrigger Allotment, located on the Owyhee Front of southwestern Idaho. The protest was filed for several reasons including (1) extension of the season of grazing use, (2) conditional extension of the season of grazing use of annual grass, (3) proposed water and pipeline developments, (4) proposed elimination of a period of rest from the allotment grazing system, and (5) the construction of fence within known populations of rare plant species.

The proposed management of the allotment would increase the season of livestock use from April 22 - August 31 to April 1 - November 30. Concern was raised that this nearly 4 month extension of the grazing season would be detrimental to native perennial bunchgrasses such as bluebunch

wheatgrass (*Agropyron spicatum*), one of the most important components of the allotment's vegetation. Bluebunch wheatgrass is harmed by early season grazing use. The decline of native perennial bunchgrass species ultimately results in a greater abundance of exotic annual grasses such as cheatgrass (*Bromus tectorum*) (and other annual species that provide poor quality forage for both livestock and native wildlife species). While the environmental assessment and management decision stated that perennial bunchgrass utilization would be limited to 40%, INPS members reviewing the proposal were concerned that monitoring efforts would be sufficient to determine when this trigger was met, particularly given the extended season of use.

The proposed allotment management decision would extend the grazing season in some areas beyond the April 1 - November 30 grazing period during years when cheatgrass is determined to be plentiful and grazing utilization remnant perennial bunchgrass has not exceeded 40%. The proposal was that additional use in these areas would reduce use in other areas of the allotment. Pahove Chapter members raised concern that this would accentuate the degraded quality of the lower elevation pastures within the allotment by exacerbating the cheatgrass problem. Additional concern was raised regarding the possible presence of the rare plant species, Mulford's

milkvetch (*Astragalus multiflorus*), in pastures affected by this proposal.

Eight proposed new water developments within the allotment would bring heavy livestock use into native plant communities and habitats that previously received relatively little livestock use. Chapter members raised concern that increased grazing pressure related to proposed water developments would be detrimental to known populations of the rare plant species, Cusick's false yarrow (*Chaenactis cusickii*) and smooth stickleaf (*Mentzelia mollis*).

The proposed management decision would eliminate any period of rest from the Hardtrigger Allotment grazing system. The Chapter raised concern that grazing use of the same area at the same time, year after year is detrimental to native vegetation and its dependent species. Incorporating a period of rest is essential to promote and encourage rangeland health.

Finally, the Hardtrigger Allotment supports at least three rare plant species: Cusick's false yarrow, smooth stickleaf, and Janish's penstemon *Penstemon janishiae*. Pahove members raised concern that construction of the 2.75 mile fence that would increase impacts of livestock grazing and trampling in rare plant species' habitat and potentially result in their decline or loss from the area.

On May 24, 2005 the Pahove Chapter filed an official appeal of the decision to proceed with the proposed allotment management plan. Several other conservation organizations also filed appeals of the administrative decision, including Western Watersheds Project, Idaho Bird Hunters, and Idaho Wildlife Federation. On December 8, 2005 parties involved in the appeals reached a settlement agreement.

The settlement requires the Bureau to conduct an new environmental assessment of the allotment management plan by December 2007. The Bureau will conduct more thorough rare plant surveys, an inventory of exotic invasive species, collect additional livestock forage utilization data, collect monitoring data in riparian and upland habitats, and conduct an analysis of the functional condition of riparian and wetland systems within the area. In the renewed environmental assessment the Bureau will address the impact of livestock grazing (including aspects of season, intensity, duration, and frequency of use) on native perennial bunchgrass communities and rare plant species, appropriate level of livestock use in relation to existing ecological condition, and the specific impacts of range improvements (such as water developments and fencing).

Boulder-White Clouds Wilderness

Rep. Mike Simpson (R-ID) introduced the Central Idaho Economic Development and Recreation Act of 2005 (H.R. 3603) on 7/28/05. The measure, which is revised from two earlier versions (the first introduced in the fall of 2004 and the second introduced in May 2005), includes a number of titles dealing with small

land conveyances, authorization of grants for rural economic development, continued motorized recreation opportunities, and the designation of more than 300,000 acres in Idaho's Boulder-White Clouds mountains as Wilderness, among other provisions. The House Resources Subcommittee on Forests and Forest Health held a hearing on the bill on 10/27/05.

Is Privatization of Our Public Lands on the Horizon?

By Dave Alberswerth, *The Wilderness Society*

2006 marks the 100th anniversary of the Antiquities Act, the landmark tool for the preservation of public lands. Theodore Roosevelt used the Act to protect more than one million acres by designating 18 National Monuments in 9 states. Now, 100 years after the Act's passage, an extreme anti-environmentalist movement is forwarding a growing number of proposals to sell or otherwise reduce public ownership or control over public lands. These proposals include the controversial sell-off of "mining claims" that was recently removed from the reconciliation bill, a legislative proposal to sell off National Parks to offset "lost revenue" if efforts to open the Arctic National Wildlife Refuge to drilling fail, and a House Resolution to raise funds necessary to respond to Hurricane Katrina and future disasters by selling land administered by the Forest Service and the Department of the Interior.

Other related efforts are geared toward changing policies so public lands benefit select groups rather than the broad public. Examples include a broad range of policy changes that make oil and gas development the dominant use of public lands, including using industry-funded volunteers to process their own drilling permits; "RS 2477", an outdated law that has been resurrected (and misused) to allow states and counties to take over public land; and an increasing number of actions geared toward giving preferential treatment for trail management to groups that can do their own fundraising and trail maintenance rather than a balance used approach to management.

HELP WANTED: A plant conservation activist is needed to help coordinate statewide efforts to conserve Idaho's native plant communities, plant species, and their habitats. The incumbent will help coordinate the review of land management planning documents, preparation of conservation white papers, and development of position statements and may develop opportunities for strategic conservation planning. Good organizational and communication skills required. The volunteer position is located within a statewide non-profit organization. Opportunities for academic credit may be negotiable. Technical guidance will be provided by professional botanists, plant ecologists, and wetland ecologists. For more information or to apply please contact Steve Rust, (208) 342-2631; srust at mindspring dot com.

Features



Member Profile: Native Plant Consultant, Gardener, Teacher

By Marlene Fritz

Entering the seventh decade of her life, Carol Blackburn vividly recalls how her interest in native plants was born: It was in the admiration she felt for "the variety, the adaptability, the complexity" of the native plants she encountered while "tromping around the chaparral and oak savannah on my grandfather's ranch near Clear Lake, Calif."

A botanical consultant who earns half her living maintaining landscapes in the Wood River Valley, Carol clearly

remembers her first gardening experiences, "way back when we had a victory garden and I was four to five years old."

But ask Carol how long she's been a member of the Idaho Native Plant Society and she impishly struggles for the year: "Hmmm ...how far back do my Rare Plant mugs go?" she ponders, rummaging through the cupboards of the rambling, 80-year-old rental home she shares with her husband, Fred.

Turns out the answer is 18 years, the last half-dozen of which she's been secretary-treasurer of the Wood River Chapter. In a community renown for its "migratory lifestyle," Carol describes herself as the "last of the chapter's old guard."

Fred and Carol moved to the Wood River Valley in 1979. They relocated from Jackson Hole -- the place where they had originally met "ages previously," before she became the second woman to earn a degree in wildlife management from Humboldt State University in 1959, before she worked as a parasitologist at the University of California's Hastings Natural History Reservation, before she took a job with the University of Montana's wildlife department. In Jackson Hole, they raised two children -- Anne, now 33, a University of Washington arts administrator in Seattle, and Will, now 36, a civilian construction department employee at a U.S. Army PX in Germany -- while Fred worked with the National Park Service and in construction and Carol conducted field work in pronghorn behavior.

Today, Carol continues to do her good work, conducting plant inventories; undertaking restoration projects for public agencies, private consulting firms, and a land trust; and teaching an occasional class for College of Southern Idaho, Blaine Campus. She works at the Sawtooth Botanical Garden (SBG) -- sometimes even for pay -- and maps and manages weeds for a variety of public and private clients. In her late 50's, she took a hiatus from the Wood River Valley to earn her second bachelor's degree -- in landscape horticulture from the University of Idaho -- an exceptional effort that she credits with assuring her competitiveness in the marketplace. Carol's academic curiosity still nudges her to design her own experiments, like evaluating which of the SBG's species of penstemon proved most resistant to deer (the Idaho native *Penstemon cyaneus* and *P. strictus*, of course, rather than *P. eatonii* or *P. globosus* from farther south).

Carol squeezes her INPS work into weeks crammed with work for both pay and pleasure. "I'm a diverse naturalist type of human being," she says. "I have lots and lots and lots of interests." Although we share Carol with innumerable other good causes, she considers the contributions of INPS to be invaluable. "We educate people to the place in which they live," she says. "We teach them to have respect for it and not to

impose other cultures' ideas of landscapes on dry, arid, Western places." Planting natives is part and parcel of "having respect for where you are" -- to say nothing of enhancing biological diversity and providing wildlife habitat.

To date, Carol's life has been delightfully entangled in plants. "They are absolutely basic," she explains. "As far as life is concerned, using only sunlight, soil, and water, and most animal life depends on them."

Carol's advice for native plant gardeners:

1. Patience: gardening is a process not an end-result.
2. Talk to everybody you know who has a garden you like.
3. More patience.

Lichen Workshop Review¹

By Adrienne Lilly

In the Classroom: Visiting Lichenologist, Toby Spribille, began with a basic introduction to lichen and its world. A chalk board at the front of the room was covered with drawings of the thallus, ascus and apothecium. As he spoke he drew more illustrations demonstrating the biology of the lichens.

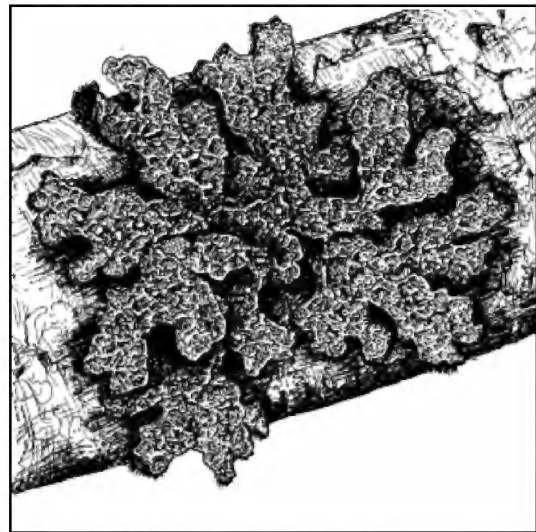
Lichens are made up of two and, sometimes, three organisms. There will always be the fungus, which gets most of the credit when it comes to naming, and then there will be green algae and/or cyanobacteria. The alga that is found in the lichen is not found outside that specific relationship. They occur as individual cells of green algae within the fungal tissue, in our example it was right below the upper cortex of the thallus. The cyanobacterium, a much smaller organism, does not have a nucleus as do algae. The fungi of the lichen world are most often ascomycetes, a type of fungus which produce spores in sac-shaped cells.

The sex lives of lichens are quite varied. As a group they reproduce asexually as well as sexually, some even do both on the same plant. Asexual reproduction is usually in the form of soredia and/or isidia, which are small bundles of fungal and algae cells that protrude off the main body and start a new colony after being separated in various mechanical ways. Sexual reproduction involves fruiting bodies called apothecia and spores. There are countless combinations in the lichen world but knowing what to look for can help identify the lichen species.

Lichens can help inform land management decisions as they have been found to be excellent indicators of subtle environmental changes. Differences in the soil composition influence the species not only occurring on the rocks and soil but also on the stem and leaves of plants. One can differentiate the lichen in large part

by the substrate on which they are hanging out. The minerals in the parent material of rock and soil create a basic or acidic environment that even influences the trees on which the lichens choose to colonize.

Then the field trip: It only took a couple minutes for our leader to find his first samples about 15 feet from the car. All one needs is a red alder tree in the woods and perhaps a paper bag. We were also shown a nifty way to make a paper envelope from just a sheet of paper. We were in search of samples from each of the 4 basic lichen forms: **Crustose** – these are almost part of the substrate, cannot be separated from the bark or rock to which it is attached. **Scale** – (or squamulose) attached on one side only, small shell like lobes. **Coleus or Leaf** – (or foliose) larger lobes, will have two distinct sides, usually with a hard attachment and hard lower surface. **Shrub** – (or



Parmelia saxatilis. Line drawing by Alexander Mikulin. USDA Forest Service, Pacific Northwest Region, Air Quality Biomonitoring Program.

fruticose) multiple surfaces, can be linear like lobes or even hair-like, difficult to distinguish top from bottom surfaces.

RED ALDER – On our red alders we started with a crustose lichen which was a light colored oval or circle that appears to be part of the bark. *Phlyctis argena*

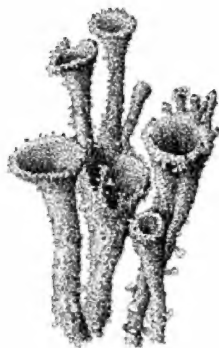
¹ *Editors Note:* This is a summary of a workshop organized by Kinnikinnick Chapter conservation committee. The classroom presentation occurred on Friday, August 19th in Sandpoint. The field trip occurred on Saturday, August 20th. Nomenclature corrections were completed by the Editorial Committee.

was seen again later on some smaller conifers with smooth young bark.

A common leaf lichen was shown next, *Parmelia sulcata* is gray on top and black on the lower surface, which looks almost hairy. The soridia are found in the cracks on the upper surface. One can actually slice this lichen and spot the layer of algae with the naked eye.

The color of lichens are often determined by acids found in their chemical makeup. We looked at *Evernia prunastri*, or staghorn lichen which was yellowish green on the top and had a white underside. Usnic acid is commonly responsible for the yellow color such as this. There is a genus named *Usnea* which we see more of at our next stop.

MATURE HARDWOODS – The next collection of lichens was hanging around on some trees at the edge of a small clearing. Toby showed us an example of the genus *Usnea*. A characteristic



Cladonia albonigra. Line drawing by Alexander Mikulin.
USDA Forest Service, Pacific Northwest Region, Air
Quality Biomonitoring Program.

common to this genus is a strong central strand that can be seen by removing the outer cortex. There were at least two types of *Bryoria*, perhaps three. They were varying shades of brown and grey with long thin branching. Apparently this genus needs good stand ventilation for healthy growth. *Bryoria lanestris* was a brown color with finer stems common in the branching. *Bryoria ferromontii* was identified by the deep pits at the base of the hairs, although that may take a well trained eye to see. *Bryoria capillaris* was a lighter grey color.

One leaf type lichen that was found was *Tuckermannopsis chlorophylla*, a brown colored lichen similar to the appearance of *Parmelia* in that it has a distinct upper and lower surface. As we started to drift across the road into a mixed stand we saw another of this genus, *Tuckermannopsis orbata*.

YOUNG CONIFER STAND – One of the most common lichen genera in North America is *Hypogymnia*. It is white on the surface and

characterized by hollow branches that can be closed or open at the branch ends. A common name is birds-bone.

Platismatia glauca is called tattered rag or lettuce lichen. Again, it can be said to have a similar appearance to *Parmelia* – but only at first glance. *Platismatia glauca* is more upright but still has a distinct upper surface that is grayish with a brown lower surface.

Many pinhead lichens were seen on the downed woody debris as well as *Cladonia* species. We found a great sample of *Lobaria pulmonaria*. It has a densely ridged upper surface; the lower surface has small whitish hairs. The younger conifers with smooth bark were a great spot to find *Phlyctis argena*. A crustose lichen that forms round to oval white marks on the trees.

Many of the followers were familiar with the wolf lichen that was found, *Letharia vulpina*. The folklore of its use to poison wolves was well known, which Toby said was partially due to the presence of the toxic volpinic acid. After lunch we saw *Parmelia saxatilis* on a branch even though it is more commonly on rocks.

MINERAL POINT – We walked out a bit to a dry and warm Douglas fir site. Toby described the Douglas fir tree trunk as paradise and said there could be as many as 25 species of lichen on that tree alone. We had a great discussion on the value of lichens towards a complete understanding of forest ecology, air quality and intrinsic value.

Some of us gathered around the tree and picnic table as others wandered out and gathered samples. We found a crustose lichen, *Ochrolechia*, that will turn red with simple household bleach, *Xanthoria* found on nitrogen rich rocks, and *Schaereria*, a brown crustose lichen with black apothecium.

The group moved to a rock outcropping hundreds of feet above the lake. When asked what he saw on those few large rocks, Toby replied he couldn't even count the number of different lichens located on those few square feet of rock as they were so abundant. He also explained lichens on rocks are less studied than other lichens.

There was a picture book example of *Rhizocarpon geographicum*, map lichen. We found *Umbilicaria* which was identified by one centralized holdfast (described as a belly button like structure). *Umbilicaria phaea* is a smoother species and *Umbilicaria torrefacta* has rhizomes that do not act as attachments. Other lichens mentioned were *Ochrolechia upsaliensis* and *Xanthoria polycarpa*.

This is only a sample of all that was happening, Toby was constantly fielding questions and identifying samples. He was very comprehensive when talking about the samples. There was so much information to learn and absorb that we could have followed him through the woods for so much longer.

Nature in the City: What Is It About Snowberries?²

By Sarah Walker

There's something odd about snowberries. Is it their whiteness? Their weird spongy texture? Snowberries are just plain odd-looking: plump and waxy with a brown stain on top from the left-over flower base (described as a 'nipple' in some plant guides).

Landscapers like this easily-grown native shrub, although it's invasive and can form thickets. Its decorative white berries ripen in early fall, side by side with the last of the summer's small pink flowers. Then the berries (or "drupes," the term for fleshy fruits with pits, like cherries) remain on the leafless, twiggy plant for most of the winter (the rest of the year, snowberry is a pretty non-descript shrub). Gardeners are on the lookout for plants that provide winter interest after flowers and leaves are gone, and new cultivars are being developed that are less invasive.

Aboriginal peoples had second thoughts about snowberry. Some Canadian tribes called them "corpse" berries, focusing on the ghostly aspect of the white drupes. They regarded the berries as food for people in the Land of the Dead. Other groups used snowberry as medicine, but with caution: a little might cure an upset stomach, too much could cause diarrhea and vomiting. The remedy for this was to eat large quantities of lard, or grease. Snowberry poultice was used to soothe sore eyes.

Children are often told to avoid white berries. This is pretty good advice, because poison ivy has white berries.

Plant guidebooks usually mention that snowberry is toxic to humans but edible for birds and mammals. The snowberry bushes in Berman Park are bearing lovely clumps of berries this winter, but during December's Big Freeze, none were eaten. Now, they are brown and squishy, and smell like an apple that got left out in the car in very cold weather. As winter progresses, birds might get less choosy and take an interest in berries still available in late winter, like snowberry or mountain ash. (Or, maybe city birds are so well-fed at feeders that they don't pay much attention to wild foods).

Web loggers, source of unexpected and untested "information," include people who have actually tasted snowberries and lived to tell about it. One person stated that snowberries taste like "bitter Ivory soap." From all the mention of snowberry's poisonous consequences, tasting is not advised!



The unusual white berries of snowberry, in Moscow's Berman Park. White symbolizes purity, cleanliness and safety in some cultures, but ghosts or corpses in others. Photograph by Sarah Walker.

Thomas Jefferson was crazy about snowberry. He grew it in his Monticello garden from seeds Lewis and Clark brought from Idaho. He declared that snowberry has "some of the most beautiful berries I have ever seen." Lewis, the explorer-botanist, wrote a pretty bland description of the white berries while he was catching up on his field notes at Fort Clatsop during the cold, rainy winter of 1805/1806: "a globular berry as large as a garden pea and as white as wax" and inside is "a soft white musilagenous [Lewis's spelling] substance."

² Reprinted from Community News, the Newsletter of the Moscow Food Coop, Moscow, Idaho.

Snowberry is called *Symphoricarpos albus* and there are two varieties native to North America. Western plants are called variety *laevigatus* and eastern plants are variety *albus*. Snowberry is widespread in the west, but considered endangered in some eastern states. The plants that were brought to England in 1817, as cover for game birds, were the western variety; our snowberry is now naturalized in Britain.

Around Moscow snowberry grows in parks, native plant gardens, and restoration projects. It grows quickly, and spreads.

Clusters of snowberries catch my eye when I'm out on winter walks. White berries under white clumps of snow may go unnoticed, but sunshine makes this tone-on-tone arrangement suddenly look interesting. The matte, dull snowberry skin, and the bright, icy snow crystals, reflect light differently, showing us the different values of the two whites. White snowberries have a subtle and unexpected beauty compared to the brilliant red, purple, orange or blue of most berries.

Editors Note: Sarah Walker is keeping an eye on snowberries around Moscow and Peck to see if they get eaten by birds this winter. She relies on Canadian Ethnobotanist Nancy Turner for information on native uses of plants, and she thanks artist Sarah Swett of Moscow for explaining the subtleties of white.



Image of Ute ladies'-tresses (*Spiranthes diluvialis*) on the Fort Hall Bottoms in a wandering spikerush (*Eleocharis rostellata*) community. Photography by C. Davis.

News and Notes

Ute Ladies'-tresses Discovered on the Fort Hall Indian Reservation

By Cleve Davis

This past August I discovered three new populations of Ute ladies'-tresses (*Spiranthes diluvialis*) on the Fort Hall Bottoms. Dr. Karl Holte, emeritus curator of the Ray J. Davis herbarium, and I verified the collection at the Idaho Museum of Natural History. Ute ladies'-tresses has long been suspected to occur on the Fort Hall Bottoms and is now known to occur in Bingham County, Idaho. There is also potential habitat for this species in Bannock County, Idaho.

This plant species is listed as threatened under the Endangered Species Act, and is currently under review for de-listing by the US Fish and Wildlife Service. This is the first time the Shoshone-Bannock Tribes have ever considered rare plant conservation and the Fort Hall Business Council is now reviewing riparian area management of the Fort Hall Bottoms to protect this orchid.

In addition to discovering Ute ladies'-tresses, I also found a few populations of spotted joepyeweed

(*Eupatorium maculatum* var. *bruneri*). The Idaho Native Plant Society currently lists spotted joepyeweed as State Priority 1. It is currently only known to occur on the Fort Hall Bottoms in Idaho.

Northwest Scientific Association Annual Meeting - March 2006, Boise

The 2006 annual meeting of the Northwest Scientific Association will occur in conjunction with Northwest Lichenologists and Idaho Chapter and Northwest Section of The Wildlife Society, March 6 - 8, 2006, at the Grove Hotel in Boise. The theme of plenary sessions is *Science, Natural Resource Management, and the Public Good: Towards a Democracy of Information and Management*. Special symposia and workshops will focus on highways and wildlife, lichen identification, the future of sagebrush conservation and management, and emerging threats of energy and recreation development. Numerous presentations will be given on a diverse range of topics, including botany and plant ecology. Early registration closes January 30. For more information or to register for the meeting navigate to http://www.vetmed.wsu.edu/org_NWS/NWSci_Home.htm or <http://www.ictws.org/updates>.



Image of spotted joepyeweed (*Eupatorium maculatum* var. *bruneri*) on the Fort Hall Bottoms in hardstem bulrush (*Schoenoplectus acutus*) community. C. Davis photograph.

INPS Education, Research, and Inventory Grant 2006 Announcement and Guidelines

The Society is pleased to announce the 2006 Education, Research, and Inventory Grant (ERIG) Program. Grants of up to \$1,000 will be awarded in 2006 to support projects that contribute to the appreciation, conservation, or advancement of knowledge of Idaho's native flora or vegetation.

The purpose of the ERIG Program is to stimulate research, conservation, and educational activities that help foster an appreciation for Idaho's native plants and plant communities. These grants are intended to promote native plant conservation through better understanding of our native flora and the factors affecting their survival. The deadline for submitting proposals is February 24, 2006. ***We encourage anyone who has a project that he or she thinks might qualify to consider submitting a proposal!***

Guidelines: Grants are intended to support direct costs of projects. Examples of costs the grants may cover include:

1. Direct costs of travel, meals, and lodging for research, conservation, or education projects.

2. Expenses for supplies and services used for the sole purpose of the native plant project (laboratory, chemicals, film, photocopying, phone, computer time).
3. Printing costs for public outreach projects or research publications.

Grant proposals should not include expenses for salary and personnel benefits, purchases of personal equipment, or expenses that are not essential to the project.

Application Procedure and Requirements:

Funding proposals should contain the following information:

1. Project title.
2. Contact person. Please provide the name, organization affiliation, address, phone number, and e-mail (if applicable).
3. Project description. Describe the project objectives, methods, and final product. Explain how the project will benefit the appreciation, conservation, or advancement of knowledge of Idaho's native flora or vegetation. Describe how success of the project will be evaluated.
4. Itemized budget. Outline an overall project budget. Include the amount you are requesting from INPS (\$1,000 or less) as well as other funding sources.
5. Project timeline. Please provide a timeline for completion of the project. Include dates for all aspects of the project, including presentation of project results.

Project proposals must pertain to native plants of Idaho. Preference will be given to proposals expected to generate information or public support that advances the conservation of native plants in the wild. Proposals that demonstrate initiative, cooperation with other organizations or agencies, and public outreach are also preferred.

Successful applicants will be required to submit a final report to INPS documenting project accomplishments, as well as a brief summary of the project for publication in *Sage Notes*.

Submit project proposals by e-mail to Michael Mancuso at mmancuso at idfg dot idaho dot gov or by post to:

Idaho Native Plant Society
ERIG Committee Chair
PO Box 9451
Boise, ID 83707

Society News and Activities

22nd Annual Rare Plant Conference Boise, Idaho, February 14 - 15

INPS is pleased to announce the 22nd Idaho Rare Plant Conference. The annual rare plant conference will occur February 14 - 15, 2006 at Idaho Power Corporate Headquarters, located at 13th and Idaho in Boise, Idaho.

The conference will follow the streamlined format of recent years. The entire group will review and discuss those species with information submitted to the rare plant organizing committee prior to the conference. A special topics session will focus on the ecology of invasive species – an increasing concern at every scale. Featured presentations promise to be educational and interesting. Program options also include afternoon workshops focusing on the biology of selected rare plant species and criteria for ranking rare plant communities.

As these special features become finalized, information will be posted on the INPS web page (<http://www.idahonativeplants.org>). Specific instructions for submitting rare plant species for discussion are posted on the INPS web page. It is important that you read and understand these instructions to ensure that species you would like to discuss will be addressed at the conference. Group discussion of species on the INPS rare plant list remains at the heart of the conference. Parking around the Idaho Power building has not improved so we recommend you stay within walking distance if possible.

If you plan to arrive on Monday evening, February 13, please join fellow members for no-host dining and beverages; 6:30 PM, at Bardenay, located at 610 Grove Street, Boise. The annual rare plant conference banquet will be on February 14, at The Waterfront, located about 3.5 miles west of Idaho Power (car pooling is encouraged). This is a great opportunity to socialize with botany friends of old, as well as make new acquaintances. Idaho's renowned botanist and esteemed mountain adventurer, Robert K. Moseley, will speak on his recent conservation studies in the mountainous regions of China.

A \$35 registration fee (\$15 for students) is due by January 31. Registration submitted after February 1 will be \$45 (\$25 for students). This year a new option to only attend the Wednesday morning special topic sessions is offered at a rate of \$15 per person (\$8 for students). The cost of the banquet is \$16.50 per person and may be attended independent of the meeting. For agency personnel facing difficulties with pre-registration funding, please RSVP by the January 31 deadline to secure the early registration rate and submit payment on arrival at the conference.

To register you may use the form which appears in this issue of Sage Notes (opposite, page 11.) Or log on to www.idahonativeplants.org to print a registration form or view the updated schedule and other relevant information.

The results of the 2005 Rare Plant Conference will be posted on the website along with results from previous years. Remember to bring your rare plant booklets from years past. Specialty publications and other items of interest will be available for purchase at the conference.

Please contact with any questions or concerns:
Cyndi Coulter, Organizing Committee Chair
(208) 287-2732 (work)
(208) 344-4834 (home)
ccoulter at idfg dot idaho dot gov (work)
inpscoulter at mcleodusa dot net (home)

Kinnikinnick Chapter

The northernmost chapter of INPS had a very successful year in 2005. Committee achievements include the following:

- **Arboretum:** The committee hired a part-time coordinator for the gardening season and had a full complement of volunteer gardeners; this allowed the arboretum to showcase hundreds of native plant species in appropriate habitats settings.
- **Conservation:** The committee discovered a new population of *Lycopodium dendroïdum* in Priest Lake State Forest (and worked with the head forester to protect it), initiated field trips to look at significant USDA Forest Service projects, commented on numerous land management project proposals, adopted the Bee Top roadless area, and acquired a global positioning system unit for further work.
- **Landscape:** The committee planted and maintained two large public areas: the trailhead of the newly opened Mickinnick Trail and the grounds of the Waterlife Discovery Center. The committee's actions ensured these areas are landscaped in appropriate natives. The committee also adopted an area at the local Hospice Healing Garden, and keep it in natives.

The chapter hosted Arbor Day at the Arboretum. Hundreds of students attended. Many entered the poster and writing contests. Docents by each tree species brought its characteristics to life for the youngsters.

Molly O'Reilly, out-going Kinnikinnick Chapter president writes, "in closing, for the past two years I have loved being president of this lively group and warmly thank each of the approximately 50 active members for her/his contributions."

Forest Management and Lichens: Presentation and Field Excursion

The Kinnikinnick Chapter conservation committee was pleased to receive INPS ERIG funding to host noted lichenologist, Toby Spribille. Toby presented a workshop on Friday, August 19th followed by a field trip on Saturday, August 20th focusing on forest management and lichens.

Eighteen people attended the 2-day event to learn how to identify lichens and learn about their relevance to forest management. Toby demonstrated how lichens are the first indicators of environmental change in forests: they decline or disappear with air pollution, their species change with increased ventilation or desiccation, and many are intimately linked with the presence of dead wood – a commodity

Idaho Native Plant Society 22nd Annual Idaho Rare Plant Conference

February 14 - 15, 2006

REGISTRATION FORM

Name: _____
Affiliation: _____
Address: _____
City: _____ State: _____ Zip code: _____
Telephone: _____
E-mail: _____

Full Conference Registration: fees cover conference materials, snacks, and beverages (February 14 - 15).

On or before **January 31, 2006** Regular: \$ 35.00
 Students: 15.00

After January 31, 2006 Regular: 45.00
 Students: 25.00

Special Topics Session Registration: optional one day registration; snacks and beverages included (February 15 only).

Regular: \$ 15.00
Students: 8.00

Banquet Registration: held on Tuesday evening, February 14, the banquet dinner is open to all.

Per individual: \$ 16.50

Number attending _____. Total Banquet: \$ _____

Total registration fee enclosed: \$ _____

Registration is payable by check to:

Idaho Native Plant Society
Rare Plant Conference
P.O. Box 9451

that is at a fraction of its former abundance in managed woodlands.

In the workshop and field trip Toby highlighted these areas: (1) what are lichens – basic biology, physiology, main groups; (2) lichens in forests – interactions with plants, animals and the trees they call home; (3) rare species and biodiversity; (4) ongoing research projects involving lichens; and (5) what the lichens have to say about different forest stand structures.

INPS Board Highlights

The INPS 2005 Fall Board meeting was held on October 19. Primary agenda items included officer and committee reports and a discussion of liability insurance. Marlene Fritz, Treasurer, provided the treasurer's report. The Board accepted the report and proposed 2006 budget. The Board recognized the need to maintain the activity of standing committees such as the Membership Committee. Cyndi Coulter, Ballot Committee, reported the result of the 2005 election and reported for Molly O'Reilly, Nominating Committee, that work is engaged to identify the 2006 -

2007 slate of officers. Marlene Fritz, Education, Research, and Inventory Grants Committee reported successful execution of 2 funded projects (conservation presentation at Sawtooth Botanical Garden; lichen workshop hosted by Kinnikinnick Chapter). Janet Benoit, Program Committee, reported that the 2006 annual meeting planning committee has formed and has established dates and the venue for the meeting. Les Bock, a Boise attorney, provided an overview of the Society's need for liability insurance. A special meeting of the Board occurred on December 10 to discuss Pahove Chapter conservation actions. The Board reviewed, and is in

INPS Salutes

Honorary Life Members

Billie Farley
Mary Grunewald McGown
Patricia Packard
Mike and Carol Prentice
Lynda C. Smithman
Robert Steele
Beth Workman
Joseph and Lois Wythe

Many Thanks to Our Patron Members

Laura and Bill Asbell (Calypso)
Charles Baun (Pahove)
Joe and Merlyn Belloff (Sah-Wah-Be)
Branching Out, LLC (Wood River)
Janet Campbell (White Pine)
Jeanne and Bill Cassell (Wood River)
Ann Christensen (Wood River)
Nancy Cole (Pahove)
Pam Conley (Pahove)
Gillian Crymes (Pahove)
Conservation Seeding and Restoration, Inc. (Loasa)
Christopher Davidson (Pahove)
Kate and Lou Dersch (Loasa)
DG Nursery and Turf (Pahove)
Barbara Ertter (Pahove)
Dan Ray and Valerie Geertson-Ray (Pahove)
Barbara J. Gentry (Loasa)
Elaine Gill (Pahove)
Alma Hanson (Pahove)
Janice Hardman (Sah-Wah-Be)
Jacie and Wayne Jensen (White Pine)
Robert Lee (Calypso)
David R. Mead (Loasa)
Reid and Nancy Miller (White Pine)
Darlene Nemnich (Loasa and Pahove)
Charlotte Omoto (White Pine)
Kaye and Hugh O'Riordan (Pahove)
Julie and Robert Randell (Loasa)
Red Willow Research, Inc. (Loasa)
Bruce and Alice Ronald (Sah-Wah-Be)
Michael Thomas and Alissa Salmore (Sah-Wah-Be)
Sawtooth Botanical Garden (Wood River)
Michael Thompson (At Large)
Eudora Thorpe (Sah-Wah-Be)
Marsha VanDeGrift (Pahove)
Klara Varga (Sah-Wah-Be)
David Varner (Pahove)
Wendy Velman (Sah-Wah-Be)
James and Eileen Whipple (White Pine)

the process of revising, portions of the Conservaton Policy. The Winter Board meeting is planned to occur on Monday, February 14, 2006.

INPS Annual Meeting - Please mark your calendar, June 23 - 25

The 2006 INPS annual meeting is planned to occur June 23 - 25 at Farragut State Park in northern Idaho. Please mark this event in your calendar and plan to join other INPS members for botanizing, fun, and fellowship.

Welcome New Members!

July 2005 - December 2005

Members at Large

Cecilia Weber
Derek Artz

Calypso Chapter

Edward and Kristine Buchler
Gloria Wurm
Sandra Kolvig

Kinnikinnick Chapter

Anton and Karla Gentz
Aric and Cecilia Spencer
Connie Clark
Dennis and Nancy Rieger
Gayle and Sue Gilespe
John Oxley
Karen Pleines
Linda and Camise Nitkowski
Liz and Ted Cork
William and Marie Valentine

Loasa Chapter

Nate Moody

Pahove Chapter

Brittany McConnell
Erik Christiansen and Linda Mazzu
Susan Ziebarth

Sah-wah-be Chapter

Amanda Fisher
Barbara Bain
Catherine Buttrick
Jeffrey Anderson
Jill Marie Smith
Ralph Maughan
Sandra Thorne-Brown
Stephen Love
Ty and Kristina Salness

White Pine Chapter

David Pierce

Wood River Chapter

Colleen Wood
Wells Rawls and Jennifer Colson

Idaho Native Plant Society Directory

Officers

President, Steve Rust
Vice President, Janet Benoit
Secretary, Jon Formowtns
Treasurer, I. Wanda Botneyes
Member-at-large, Pam Smelowsky
Past President, Kristin Fletcher

Committee Chairs

Conservation Committee, Tom Jefferson
Program Committee, Janet Benoit
Membership Committee, Lisa Hahn
Education, Research, and Inventory Grants Committee, Michael Mancuso
Nominating Committee, Molly O'Rielly
Ballot Committee, Cyndi Coulter
Editorial Committee, Steve Rust
Website Committee, Paul Shaffer
2006 Annual Rare Plant Conference Planning Committee, Cyndi Coulter
By-Laws Revision Committee
Native Plant Gardening and Restoration

Calypso Chapter

PO Box 331
Careywood, ID 83809
President, Bob Lee
Vice President, Open
Secretary, Phil Hruskocy
Treasurer, Janet Benoit
Newsletter, Phil Hruskocy

Kinnikinnick Chapter

206 N. 4th Ave
PMB 162
Sandpoint, ID 83864-1424
President, Molly O'Reilly
Vice President, Connie Horton
Secretary, Annette Fraser-Runnalls
Treasurer, Marilyn George
Conservation, Phil Hough and Joyce Pence
Membership, Rae Charlton
Newsletter, Mary Jo Haag, Wendy Aeschliman, and Margareta Larson
Arboretum, Sylvia Chatburn
Education, Jim and Cheryl Stern
Landscaping, Eileen Atkisson and Parise Whitley

Loasa Chapter

1409 Bitterroot Drive
Twin Falls, ID 83301
President, Steven Paulsen
Treasurer, Merri Neiwert
Conservation, Steven Paulsen
Education Chair, Kim Pierson
Newsletter, Miriam Austin.

Pahove Chapter

PO Box 9451
Boise, ID 83707
President, Cyndi Coulter
Vice President, M. Wentfishin
Secretary, Gillian Crymes
Treasurer, Jody Hull
Newsletters/reminders, Cyndi Coulter

Sah-Wah-Be Chapter

5157 Whitaker Rd.
Chubbuck, ID 83202-1619
President, Cathy Frischmann
Vice Presidents, Mel Nicholls
Secretary, Susan Hunter
Treasurer/Membership, Janet Bala
Newsletter, Ardys Holte and Dana Bergsbaken

White Pine Chapter

PO Box 8481
Moscow, ID 83843
President, Al Stage
Vice President, Paul Warnick
Secretary, Open
Treasurer, Karen Gray
Environmental Impact and Forest Plan Comment, Angela Sondenaa
Publicity, Tyson Kemper
Newsletter, Nancy Miller
Landscaping and Restoration Plant Lists, Juanita Lichthardt
Past President, Sonja Lewis

Wood River Chapter

PO Box 3093
Hailey, ID 83333
President, Tess O'Sullivan
Vice President, Joanne Vassar
Secretary-Treasurer, Carol Blackburn

IDAHO NATIVE PLANT SOCIETY (INPS) is dedicated to promoting interest in native plants and plant communities and to collecting and sharing information on all phases of the botany of native plants in Idaho, including educating the public to the values of the native flora and its habitats. In keeping with our mission, it is the intent of the INPS to educate its membership and the public about current conservation issues that affect Idaho's native flora and habitats. Membership is open to anyone interested in native flora of Idaho. Send membership information and other correspondence to INPS Treasurer, Box 9451, Boise, ID 83707. Website address: www.IdahoNativePlants.org.

CATEGORY	2004 ANNUAL DUES
___ Patron	\$35
___ Individual	\$15
___ Household *	\$20
___ Student	\$ 8
___ Senior Citizen	\$ 8

Name _____
Address _____
City/State _____ Zip _____
Telephone _____

Chapter affiliation preference (check one):

- ___ Calypso (Coeur d'Alene; please include \$6 chapter dues)
___ Kinnikinnick (Sandpoint; please include \$10 chapter dues)
___ Pahove (Treasure Valley)
___ Sah-Wah-Be (SE Idaho)
___ White Pine (Palouse)
___ Loasa (Magic Valley)
___ Wood River (Wood River Valley; please include \$7 chapter dues)
___ None. Those who do not live near a chapter are encouraged to join. We can put you in touch with other members in your area, and can coordinate with you on any state level activities you may wish to be involved in.

* Household memberships are allocated two votes

Idaho Native Plant Society
PO Box 9451
Boise, ID 83707

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